

JUN 14 2006

Exhibit #1

**510(K) SUMMARY**

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR §807.92.

The assigned 510(k) number is:\_\_\_\_\_.

**1. Submitter's Identification:**

Microlife Intellectual Property GmbH, Switzerland

Max Schmidheiny-Strasse 201  
9435 Heerbrugg / Switzerland

Date Summary Prepared: May 18, 2006

Contact: Mr. Gerhard Frick

**2. Name of the Device:**

Microlife Wrist Watch Blood Pressure Monitor, Model BP3AX1-4U

**3. Information for the 510(k) Cleared Device (Predicate Device):**

Microlife Wrist Watch Blood Pressure Monitor, Model BP3AX1, K#040002.

**4. Device Description:**

The Microlife Wrist Watch Blood Pressure Monitor, Model BP3AX1-4U is designed to measure the systolic and diastolic blood pressure and pulse rate of an individual by using a technique in which an inflatable cuff is wrapped around the wrist. Our method to define systolic and diastolic pressures is similar to the auscultatory method but uses an electronic semiconductor pressure sensor rather than stethoscope and mercury manometer. The sensor converts tiny alteration in cuff pressure to electrical signals; by analyzing those signals to define the systolic, diastolic and calculating pulse rate is a well known technique in the market called the "oscillometric method". The device can be used in connection with your personal computer (PC) running the Microlife Blood Pressure Analyzer (BPA) software. The memory data can be transferred to the PC by connecting the monitor via cable with the PC.

5. **Intended Use:**

Microlife Wrist Watch Blood Pressure Monitor, Model BP3AX1-4U is a device intended to measure the systolic and diastolic blood pressure and pulse rate of an adult individual by using a technique in which an inflatable cuff is wrapped around the wrist.

The device can be used in connection with your personal computer (PC) running the Microlife Blood Pressure Analyzer (BPA) software. The memory data can be transferred to the PC by connecting the monitor via cable with the PC.

6. **Comparison to the 510(k) Cleared Device (Predicate Device):**

Both devices use the well-known oscillometric method within the software algorithm to determine the systolic and diastolic blood pressure and pulse rate. Wrist cuff is inflated automatically; deflate rate is controlled but a factory set bleed valve and the deflation pressures are transferred via tubing to a sensor in both units. They use semiconductor pressure sensor instead of capacitive pressure sensor to translate the pressure variations to electrical signals that can be interpreted by an integrating circuit. Moreover both devices have a MAM function.

The difference between BP3AX1-4U and the predicate device is the addition of a PC function. The device can be used in connection with your personal computer (PC) running the Microlife Blood Pressure Analyzer (BPA) software. The memory data can be transferred to the PC by connecting the monitor via cable with the PC.

7. **Discussion of Non-Clinical Tests Performed for Determination of Substantial Equivalence are as follows:**

Testing information demonstrating safety and effectiveness of the Microlife Wrist Watch Blood Pressure Monitor, Model BP3AX1-4U in the intended environment of use is supported by testing that was conducted in accordance with the FDA November 1993 Draft "Reviewer Guidance for Premarket Notification Submissions", DCRND, which outlines Electrical, Mechanical and Environmental Performance Requirements.

The following testing was conducted:

- a. Reliability Test - Storage Test
- b. Reliability Test - Operating Test

- c. Reliability Test - Vibration Test
- d. Reliability Test - Drop Test
- e. Reliability Test - Life Test
- f. EMC Test
- g. PC-link software BPA Test

None of the testing demonstrated any design characteristics that violated the requirements of the Reviewer Guidance or resulted in any safety hazards. It was our conclusion that the Microlife Wrist Watch Automatic Blood Pressure Monitor, Model BP3AX1-4U tested met all relevant requirements of the aforementioned tests.

**8. Discussion of Clinical Tests Performed:**

ANSI/AAMI SP10-2002 "National Standard for Manual, Electronic or Automated Sphygmomanometers" testing was performed on our predicate device. All relevant sections were addressed and testing conducted. The BP3AX1-4U met all relevant requirements of this standard, as applicable to our modified device. Repeat testing was not performed for the modified device, as clinical testing results were not affected by the changes to the modified device.

**9. Software information:**

In keeping with current FDA policy on software level of concern, the modified device is consistent with a moderate level of concern. We provided software documentation in accordance with the FDA November 2005 document "Guidance for the Content of Premarket Submissions for Software Contained in Medical Devices ". Moreover, the subject device requires the use of off-the-shelf software to operate the PC-link function, and we met all required elements as outlined in FDA's "Off the Shelf Software Guidance Document".

**10. Conclusions:**

We have demonstrated that the Microlife Wrist Watch Blood Pressure Monitor, Model BP3AX1-4U, is as safe and effective as our predicate, the Microlife Wrist Watch Blood Pressure Monitor, Model BP3AX1 based on electrical, mechanical and environmental testing results as well as the FDA DCRND November 1993 Draft "Reviewer Guidance for Premarket Notification Submissions", and our "Risk Analysis", as supplied with this submission.



DEC - 7 2006

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

Microlife Intellectual Property GmbH  
c/o Ms. Susan D. Goldstein-Falk  
Official Correspondent  
mdi Consultants, Inc.  
55 Northern Blvd., Suite 200  
Great Neck, New York 11021

Re: K061403

Trade Name: Microlife Wrist Watch Blood Pressure Monitor, Model BP3AXI-4U  
Regulation Number: 21 CFR 870.1130  
Regulation Name: Noninvasive Blood Pressure Measurement System  
Regulatory Class: II  
Product Code: DXN  
Dated: May 18, 2006  
Received: May 19, 2006

Dear Ms. Goldstein-Falk

This letter corrects our substantially equivalent letter of June 14, 2006.

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

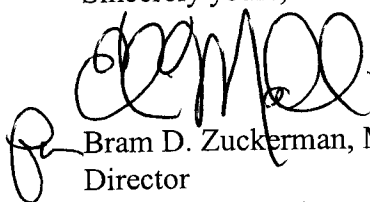
Page 2 – Ms. Susan D. Goldstein-Falk

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (sections 531-542 of the Act); 21 CFR 1000-1050.

This letter will allow you to continue marketing your device as described in your Section 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801), please contact the Office of Compliance at (240) 276-0120. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). You may obtain other general information on your responsibilities under the Act from the Division of Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (240) 276-3150 or at its Internet address <http://www.fda.gov/cdrh/dsma/dsmamain.html>

Sincerely yours,

A handwritten signature in black ink, appearing to read 'Bram D. Zuckerman', is written over a horizontal line.

Bram D. Zuckerman, M.D.

Director

Division of Cardiovascular Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Exhibit# B

## Indications for Use

Page 1 of 1510(k) Number (if known): K061403

Device Name: Microlife Wrist Watch Blood Pressure Monitor, Model BP3AX1-4U

## Indications For Use:

The Microlife Wrist Watch Blood Pressure Monitor, Model BP3AX1-4U with semiconductor pressure sensor is a device intended to measure the systolic and diastolic blood pressure and pulse rate of an adult individual by using a technique in which an inflatable cuff is wrapped around the wrist.

The device can be used in connection with your personal computer (PC) running the Microlife Blood Pressure Analyzer (BPA) software. The memory data can be transferred to the PC by connecting the monitor via cable with the PC.

Prescription Use \_\_\_\_\_  
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use X  
(21 CFR 801 Subpart C)

(PLEASE DO NOT WRITE BELOW THIS LINE-CONTINUE ON ANOTHER  
PAGE OF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

B. Bismuth  
(Division Sign-Off)  
Division of Cardiovascular Devices  
510(k) Number K061403